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## (54) DESIGN METHOD FOR VECTOR QUANTIZER AND VECTOR QUANTIZER

## (57) Abstract:

PURPOSE: To provide the method minimizing average distortion regardless of signal distribution in the design of a code book.

CONSTITUTION: A code word is 'copied' or 'lost' based on the 'principle of equal distorsion'. For example, when each code word is selected at a closest vector, a distortion d(x, y) is integrated (103), and when an input data number (t) reaches a number T (101), an adaptive degree is calculated (105) in response to an accumulated distortion  $g_1(=\Sigma d(x, y_c))$ , a copy of the relevant code ward is generated in terms of probability in response to the adaptive degree (106) and a new code word group is obtained by adding a random vector to each copy respectively (107) and the code book is revised by the code word group (108).

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